TOWARDS A SUSTAINABLE PHILADELPHIA

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PUBLISHER'S NOTES

I know I'm not supposed to play favorites, but of all the pieces in our inaguaral issue, I like Destinee-Charisse Royal's piece on For My Daughter Library the best. Before I explain why, I'd like to give a little love to some other stories, too, so they don't get jealous.

Our cover subject, Mike McKinley, surfs, and he exudes a laid-back surfer vibe. But you won't mistake his cool for indifference; Mike infuses an activist energy into his business, taking time to do educational talks at every opportunity. I'm thrilled to have him on the first cover of *Grid*.

I'm also excited to have prominent members of the community participating in *Grid*, as well. Mark Alan Hughes, Philadelphia's Director of Sustainability, plans to answer questions from our readers on a monthly basis; Bob Pierson, the head of Farm to City, will keep us posted on what is in season and available. Every month we will profile a community leader; this month we had the pleasure of speaking with energy veteran Liz Robinson of the Energy Coordinating Agency.

The staff did a great job finding some shorter stories, too numerous to single out, revolving around unique businesses, events and institutions in Philadelphia. Our hope is that it will inspire you to seek out that locally-owned restaurant or support the local artist and forge your own connection to the city.

Our energy section is chock full of helpful information. We can't urge you strongly enough to get a home audit if possible, and if you can't, have a look at how you might curb your energy consumption. We've already entered into an uncertain age regarding energy, and, as we explain in the introduction to the section, we need to pull together and prepare like never before.

All that said, my favorite story remains the one that might seem, to some, not to fit into our editorial purview. I mean, what does a kids' library have to do with our carbon footprint? "Young people are resources," says For My Daughter Library founder Yvonne Haughton. That idea is the central difference between "going green," which companies do to save money and face, and sustainability, which is what we do to save each other.

This is our first issue, so please bear with me as I thank some people who made it possible. First, hats off to our subscribers and advertisers. It takes a lot of guts to put your faith (and money) into a fledgling project such as this. We won't forget your early support, and we'll do our best to never let you down. Thank you to the hundreds of readers who sent letters; it is truly inspiring to see how many people share our passion and want to be part of *Grid*. Thank you to Dana Henry, Will Dean and Ashley Jerome, who all worked tirelessly to whip this magazine into shape; good job, and, yes, you can start working from home on Sundays. Finally, I need to thank my fiancée Ellen, who awaits me in the kitchen. It's time to close the laptop and make some applesauce.

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Printed in the USA on Leipa's 43.9 lb Ultra Mag gloss paper.
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Ask Mark

Philadelphia's Director of Sustainability, Mark Alan Hughes, answers our readers

Q: [What is] your vision for residential solar power in Philadelphia's energy future? Many Philadelphians, like me, have homes with flat roofs that receive plenty of direct sunlight. Is the city considering any programs that would help us tap into that potential power, like California's "Million Solar Roofs" project?
—Tom Schrand, *Director of the Environmental Sustainability Program at Philadelphia University*

A: Thanks, Tom. Great question. Just to clarify, Philadelphia's own Million Solar Roofs Partnership (PMSR) was established in 1999 by the Energy Coordinating Agency and the Sustainable Development Fund. It was a regional effort to contribute new solar installations to a national goal of one million by 2010. Through public/private collaboration, public education, developing a market and infrastructure for solar applications, and providing training opportunities to those interested in solar technologies, the PMSR helped to install approximately 185 systems.

Ten years later, the country is poised for a major expansion in solar power, and Philadelphia wants to be right there to take advantage of any opportunities that will foster both utility-scale and small-scale projects. We're working with a number of solar companies to investigate the installation of large arrays that feed the grid directly. Distributed generation can add capacity without further burdening the regional and national electricity grid ,and we want to use some of our larger sites for that purpose. It is not easy, though. Innovative financing options and a demand for RECs (Renewable Energy Credits) are needed to help to make such projects a reality

But your question is about deploying solar at the scale of individual houses and neighborhoods, and especially to take advantage of Philadelphia's iconic rowhome. We have over 400,000 of them, and their flat roofs and shared walls create some great opportunities for solar installations.

The first thing we need to do is make it easy to use all the tools we already have, including the new grant funding we anticipate through the PA Department of Environmental Protection (DEP). To do so, we need to create transparency in the process of installing an affordable solar or solar thermal system. To that end, Philadelphia is now a Solar America City partner with the U.S. Dept of Energy and other Solar America cities throughout the country. This partnership will support our efforts to lower those barriers and end the confusion. We will launch a new website this winter that will help residents and businesses learn about both the benefits of solar power and the help available to install it.

Next, we need to improve upon the tools we have. That's the longer-term agenda of the Mayor's Office of Sustainability. We are looking into the feasibility of programs like a Solar Shares program that provides solar to customers who can't have it on their own roof through a community-supported solar project. We are investigating financing options like Berkeley FIRST that enable a homeowner to pay for an installation through a special tax on their property bill.

Where solar has been most widely used in the residential sector, there are powerful incentives for homeowners to sell electricity back to the grid. The state of Pennsylvania enables a customer to take advantage of net metering and we are exploring virtual net metering, potentially improving the economics even more. Germany's solar radiation is weaker than rainy Seattle, yet it has the world's largest number of solar energy installations. We want to look at the policies that shape their energy sector and consider the possibilities that will work best for Philadelphia.

Have a question for Mark? Send an email to askmark@gridphilly.com

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Conserving Our Future

Liz Robinson talks about Philly's energy problems and a different path forward

Liz Robinson has been helping Philadelphia conserve energy since 1979. As Executive Director of the Energy Coordinating Agency, an energy nonprofit that services low-income residents, Liz has worked on the Energy Efficiency Resource Standard, which instituted early efficiency measures for Philly's affordable housing. She also founded the Keystone Energy Efficiency Alliance and, in the late 90s, she administered the Philadelphia Million Solar Roofs Partnership. Currently, Liz sits on the Sustainability Advisory Board, which counsels Mark Alan Hughes.

GRID: What are the biggest problems facing Philadelphia in terms of energy?
The price of energy has become a real problem. The average price of energy, including heating, water heating, electricity and water, is more than $4,000 a year. That's quadrupled from where it was 15 years ago. We're also seeing for the first time that the majority of delinquency [in paying energy bills] and termination [for utilities] is not among low-income people—it's actually now in the middle-income sector. That group and elderly people on pensions are being really hard hit.

What would you recommend for people who are having trouble paying their bills?
The best defense is conservation. Energy conservation and efficiency reduce your bill immediately and reduce it permanently. Philly's full of very old and very inefficient buildings. We've never [inspected] a building that didn't have a [potential] 20 percent reduction. Many buildings have a [potential] 50 to 60 percent reduction, so it's very cost-effective. What we've been working on is state support for energy conservation. This past six months, two very important pieces of legislation have been passed. In July, the legislature passed what is now called the Alternative Energy Investment Act. We will see programs on the street by the end of the calendar year. That is in addition to the federal tax credits, which were just renewed. In combination with the state funding, it'll be more affordable for people to make the energy efficiency upgrades to their homes.

Why do you think energy prices are going up so much lately?
I think peak oil is real and all of the world's geologists say that we are at peak. Once the Saudis and everyone else are pumping as much as they can out of the ground, despite incredibly high prices and personal pleas from George Bush, no one could increase production, and they tried. I think we're at the physical limit of what can be pumped out of the ground. The combination of the United States ignoring this problem—sticking our heads in the sand and continuing to consume more and more each year—[and] China and India and other countries really starting rapid development of their economies has created demand that is not sustainable and that's driven prices up. The solution for this country is to create a new energy future not just for ourselves, but for the world, because the world looks to this country. Everyone follows our lead, and we have been leading everyone over a cliff. We need to stop that and create a path towards a clean energy economy that is affordable for everyone. The central pillar of that has to be lowering demand; there is not enough clean energy to replace the dirty energy we're using now. Fifty-one percent of the entire clean energy resource in the U.S. is energy efficiency and conservation. It's bigger than solar, wind, biomass, biofuel [and] geothermal rolled together. You don't hear people talking about it, but that's the reality. Unless we rapidly reduce our consumption and reduce our demand for energy, we can't control price. When the economy comes back, the price is expected to spike and that kind of price instability is really bad for people. It's very disruptive. Energy prices need to come down and stabilize at a lower rate, and once they do that the economy can be restored.

> The central pillar has to be lowering demand; there is not enough clean energy to replace the dirty energy we're using now.
>
> → Liz Robinson, *Energy Coordinating Agency*

We're going to have a new president soon. What do you think he should do to help alleviate America's energy problems?
I think there's already a lot of discussion about another stimulus package and about weatherization. With the bailout package, the funding for Weatherization Assistance Program was increased and now there's talk about further expanding it. Obama has talked already about weatherizing a million homes a year. There already is more talk in Washington about climate change, which you're not hearing about in the media, but there's a lot more talk about curbing carbon emissions, and a lot of that comes from buildings. So finally, we'll see attention paid to efficiency in buildings.

PHOTO BY SARAH GREEN

Iron Chef: Fishtown

Why a cast iron skillet is all you'll ever need

by TENAYA DARLINGTON

SEVERAL YEARS AGO, I moved into an old house in Madison, WI and found a cast iron skillet in the basement. Raised by Teflon lovers, I was wary. It took a graybeard neighbor—a kind of cast iron prophet—to convince me I should try it. "You won't get Teflon flakes in your food. They're carcinogenic, you know," he said, stoking his wood stove. "Plus, stuff just tastes better cooked in cast iron." Converted, I ran home, scrubbed the skillet down with steel wool and fried up some kielbasa and potatoes. Damn if the graybeard wasn't right. Dinner tasted fantastic; the kielbasa browned perfectly and the potatoes were crispy. Later, I learned that cooking with cast iron boosts the iron in your diet and the skillet became my one true pot.

Now, I live in a drafty Fishtown rowhome with my beau, and to stay warm we cook like fiends. The cast iron skillet comes in handy three meals a day and at night it doubles as a bed warmer—just heat it, wrap it in towels and tuck it between the covers at the foot of your bed. Feeling the skillet by my feet in the morning reminds me to make a Dutch Baby, a one-dish pancake that puffs up in the oven like a soufflé (and tastes like manna, served with sliced bananas, syrup and toasted walnuts). For lunch, I'm partial to skillet-grilled brie and fig jam sandwiches, or quick cornbread and soup. A skillet-baked chicken makes for an easy supper, although I've made a new discovery: skillet pizza. The crust snaps like it's been made with a pizza stone.

If you've never used cast iron before, here are a few tips: Don't use soap. Scrape off baked-on foods with a wooden scraper, then rinse the pan with warm water and dry it well to prevent rust. To maintain cast iron, rub it down with some vegetable or mineral oil every few days, or if you notice that the surface lacks luster. When you're ready to fry, use medium heat and add the oil when the skillet's surface looks shiny. Prowl around at yard sales if you're in the market for your first skillet, or pick up a pre-seasoned pan at Foster's Homeware (399 Market St.) or Fante's (1006 S. Ninth St.) in the Italian Market. Then fry up some potatoes, or better yet, make an oven-pancake supper, and you'll wonder how you ever made it through a winter skillet-less.

Want to write about your experience transitioning to a sustainable practice? Email dana@gridphilly.com

Skillet Pizza

pizza dough
(enough for two 12-inch skillet pies)
pizza sauce or pesto
olive oil
toppings (try pepperoni, black olives, mushrooms, purple onion)
cheese (a combination of mozzarella, parmesan and cheddar is nice)

The key to a crisp skillet pizza is heating the pan before you add the dough, and cooking the crust for about 15 minutes before you add the toppings; otherwise, your pizza will be doughy. When your dough is ready, place the skillet in your oven and preheat the oven to 450°F. When the skillet is hot, coat it with olive oil, and press flattened dough into pan. Gently puncture the dough with a fork to prevent air bubbles, then bake for about 15 minutes, or until golden. Add sauce, toppings and cheese, then lower the heat to 350°F and return the skillet to oven for 10–15 minutes.

Grilled Brie and Fig Jam Sandwiches With Caramelized Onions

1	medium onion, sliced
pinch	salt
2 tbs.	olive oil
1 tbsp.	brown sugar
1 tbsp.	balsamic vinegar
½ tsp.	rosemary
2 tbsp.	butter
	good bread (crusty sourdough works well)
	brie
	fig preserves (or chutney)

Heat the skillet over medium heat. Add oil, then onion, salt and rosemary. Heat to cook until the onion is nicely seared, then reduce heat to low and cook for about 10 minutes, or until the onion is translucent. Add brown sugar and vinegar, stirring until nicely browned. Set onions aside and run the skillet under warm water to clean, then return it to the stove over medium heat. On a cutting board, butter two slices of bread, flip them over so the butter faces down and slather with fig jam, caramelized onions and brie. Grill over medium heat, flipping the sandwiches until both sides are browned and cheese has melted.

PHOTO BY JAMIE LEARY

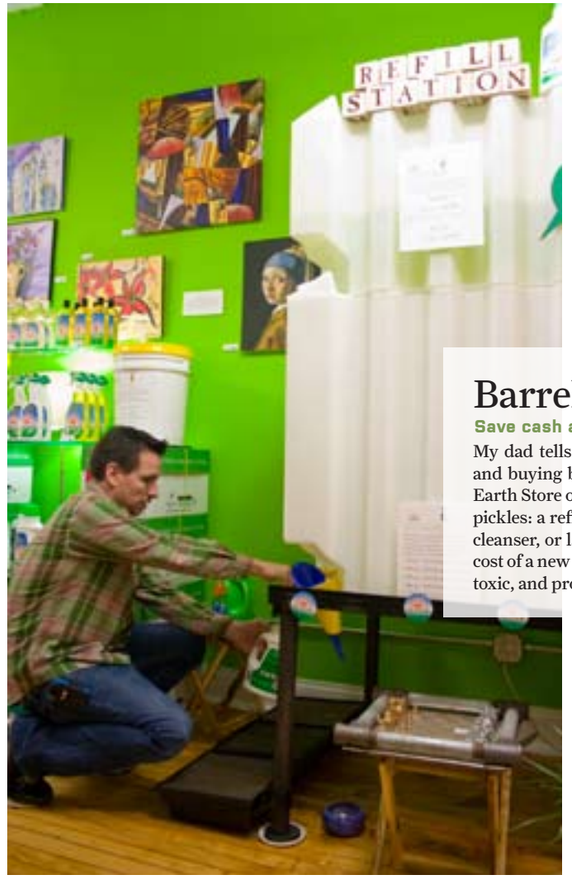

PHOTO BY LUCAS HARDISON

Fluid Needs

Make your water cooler

At first glance, the office water cooler looks innocuous, especially if you forego the dumpster-bound plastic cup and refill your (Philadelphia Phillies, 2008 World Champions) glass instead. However, there's one key wasteful component unaccounted for: energy consumption. Yup, those heavy jugs need to be manufactured and then carted around town by big trucks—and they aren't running on hydrogen. That's where a bottleless water filtration system, which taps into your existing water line, comes in. The water is purified on the spot, and you might be surprised to learn that tap water quality is regulated, unlike bottled water. For over 22 years, our neighbors in Mount Laurel, NJ Arctic Coolers (www.arcticcoolers.com) have offered this service. Oh, and it seems to save money, too.

Barrel Fever

Save cash and plastic by refilling your detergent bottles

My dad tells stories about going down to the corner store when he was a kid and buying black olives or pickles from a barrel. Well, down at the Big Green Earth Store on 2nd and Market, they have something almost as fun as a barrel of pickles: a refillable detergent station. Bring in your empty bottles of all purpose cleanser, or laundry or dish detergent, and you can refill them for less than the cost of a new bottle. No need to worry about the safety of the cleanser; it's all non-toxic, and produced by Sun & Earth from King of Prussia.

Cowboy Up

Be a man of steel and ditch the shaving can

Tired of tossing stainless steel shaving cream cans into the trash? I was, so I went over to Whole Foods and discovered an old-fashioned bar of shaving soap by a company called Herban Cowboy. The shave is different, and a little rougher, but you'll quickly grow accustomed to it, and before long the chemical fragrances from a can will seem alien. The company was started by a Pennsylvania couple, but they've since relocated to Minnesota. Boo! Any local soap makers have a competing product to offer? —ALEX MULCAHY

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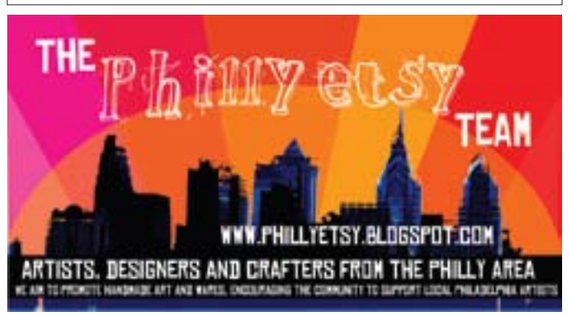

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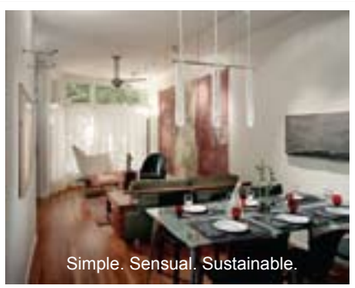


IN SEASON

A New Leaf... For Dinner!

by BOB PIERSON & JOANNA PERNICK OF FARM TO CITY

Winter in Philadelphia offers pleasant surprises:

Cooking greens are tolerant of winter and can be grown in greenhouses. Soft, earthy spinach gets sweeter as the weather grows colder and its dark green color is welcoming amid the gray.

Garlic is easily dried and stored, and it will transform your cooking. After tasting the startlingly sharp, vibrant bite of garlic grown by a local farmer, you can't return to the bland, potentially tainted, supermarket brand.

Have you ever cooked or baked with **fresh cranberries**? They're crunchy, with a white band inside firm crimson skin. The color adds a little glamour to any dish, and the burst of tartness captures the tongue.

Any variety of **apples** is good for cooking or baking, but if you don't have time, Gold Rush apples are good for snacking. They're crisp, with a perfect mixture of tart and sweet!

RINEER FAMILY FARMS

Rineer Family Farms, roughly 70 miles west of Philadelphia, supplies the city with local produce and pasteurized beef throughout the winter. Using four greenhouses and a crop storage system, Daryl Rineer brings us potatoes, turnips, spinach, carrots, parsnips, brussels sprouts and more. Buy their produce on Saturdays throughout the winter at the Rittenhouse Farmers Market, or taste some freshly prepared by the chefs at Southwark, 701 S. 4th St.

There are over 500 local foods available during the winter. See the complete list at www.farmtocity.org. Saturday Farmers' Markets are open all winter long, 10 a.m. to 2 p.m., at Clark Park (43rd & Baltimore), Rittenhouse Square (18th & Walnut) and Fitler Square (23rd & Pine).

FIRE IN THE KITCHEN WITH ASHLEY JEROME

Beef Roast with Herbed Horseradish Crust

1	Six lb. boneless beef roast
¼ cup	olive oil
¾ cup	horseradish
10 cloves	garlic, finely chopped
2 sprigs	fresh rosemary (leaves removed)
2 sprigs	fresh thyme (leaves removed)
3 tbsp.	whole grain mustard
½ tsp.	kosher salt
½ tsp.	fresh pepper

Preheat the oven to 350 degrees. Coat a large roasting pan with olive oil, and set it over two burners on the stove.

Once thoroughly heated, add the beef roast and brown on all sides. Roughly 2-5 minutes each side. Remove the roast and set aside to cool. Save the oil from the pan. Put the rest of the ingredients in a food processor. With the food processor on low, add the olive oil slowly. Place a rack inside the roasting pan; place roast on top. Coat the sides and top of roast with the horseradish mixture. Bake 1hr 45min (rare) or 2hr (medium). For extra-crispy crust place under broiler for 5-7 min., but watch closely so it doesn't burn. Let stand for 30 minutes and dig in!

EAT THIS

Olive Thyme Rolls

from Four Worlds Bakery

Nothing matches a hot bowl of soup like a warm crusty olive thyme roll. Using mostly local ingredients, Michael "Challahman" Dolich bakes an assortment of breads from his bakery, and has them delivered by the Pedal Co-Op. Find his bread at Kaffa Crossing at 4423 Chestnut St., Fair Food Farmstand at the Reading Terminal and Essene Market at 719 S. 4th St., or online at www.fourworldsbakery.com.

Tofu Inc., Allentown
Locally made tofu. Silkily delicious. Also available at Essene Market.

Apple Cider Vinegar from Green Meadow Farms
This local vinegar is aged two years, made from local apples and makes a great ingredient for homemade dressing! Available at Fair Food Farmstand in the Reading Terminal Market.

Amish Beef Jerky
A naturally-made guilty pleasure from Lancaster County, this jerky is available in BBQ, Hot and Spicy and Old-Fashioned. Get it at Hatville Deli in the Reading Terminal Market.

ILLUSTRATION BY J.P. FLEXNER

SPEND A SATURDAY

WEST MOUNT AIRY

Rothe Florists enters it's second century in business; Infusion serves some ethical holiday cheer.

Photos by Lucas Hardison

THIS FIVE BLOCK STRETCH of Germantown Avenue isn't gushing to tell its secrets. You'll find tall trees and narrow, stone-laid storefronts, not neon lights. But don't let the formal appearance fool you. Step inside. A shop owner, who probably lives just a few blocks away, will show you Mount Airy's experimental side.

Neighbors make soaps, jewelry, crafts and fine arts, then showcase them at artist-owned stores like Artista and Jean-Jacques Gallery. Looking for castaway finds? High-end suits, gowns, lingerie and jewelry at What A Girl Wants & a guy needs are priced at five to 10 percent of their retail value and sold with chocolate Mount Airy Rocks. Past and Present carries feather boas, wigs, and all things 'dress-up.'

Start your day at the Trolley Stop Diner on the 7600 block. The stainless steel eatery, ice cream shop and deli, plucked right from 1952, replaced a Roy Rogers. Walk east for fair trade coffee on the couches of InFusion–A Coffee and Tea Gallery. Add in some well-being with Black Olive Marketplace's foods and supplements, priced below market standards, complete with family-focused nutrition workshops. Take a break at the historic Sedgwick, or "Little Theater," which serves ice cream and popcorn with $6 screenings from the Video Library's public collection. Nighttime's a live show with dinner at North by Northwest or fresh-baked flatbreads and original beers at Earth, Bread and Brewery.

West Mount Airy is a Philly stronghold. Some of the businesses, like the hundred-year-old, fourth-generation owned Rothe Florists, have been here a very long time. Road construction, which lasted for a year and a half, wasn't kind, and even shuttered some businesses. But the cranes have been cleared, the jackhammers silenced, and even though West Mount Airy doesn't like to shout, its people are hardly shy. "It's a state of mind," says lifelong resident Bill Dikeman. "You find all these things you didn't even know existed, things you hadn't anticipated... surprises."

West Mount Airy, 7100-7600 Germantown Ave., now holds First Friday arts walks. Their PhillyCarShare pods are at Durham St. and Germantown Ave. Take the 23 or the R8 to the Allen's Lane stop and walk north two blocks.

WHEN IN NEED

West Philly Tool Library 1

The West Philly Tool Library has the hookup for all your DIY needs. With an assortment of 841 tools, including extension ladders, circular saws and cordless drills, you can take on home improvement projects and outdoor clean-up efforts. Become a member for $20/year or $120/lifetime. 4620 Woodland Ave., Tue. or Thurs. between 6:30 and 8:30 p.m. or Sat. from 9 a.m to 2 p.m. www.westphillytools.org

BY US FOR US

Fabric Horse Bike Lock Holster 2

Bike locks aren't made for your back pocket. Fabric Horse constructed these holders from junkyard-salvaged seatbelts. They slip right through your belt loops for a hassle-free ride. $8.50, www.fabrichorse.com

Demarah Natural Lip Balm

Taking care of your lips isn't just for ladies. Cold weather can do quite a bit of damage, so soothe your lips with this naturally-made local product. Flavors vary from peppermint to dark chocolate, with prices starting from $1.50. Vegan balm available. www.demarah.com

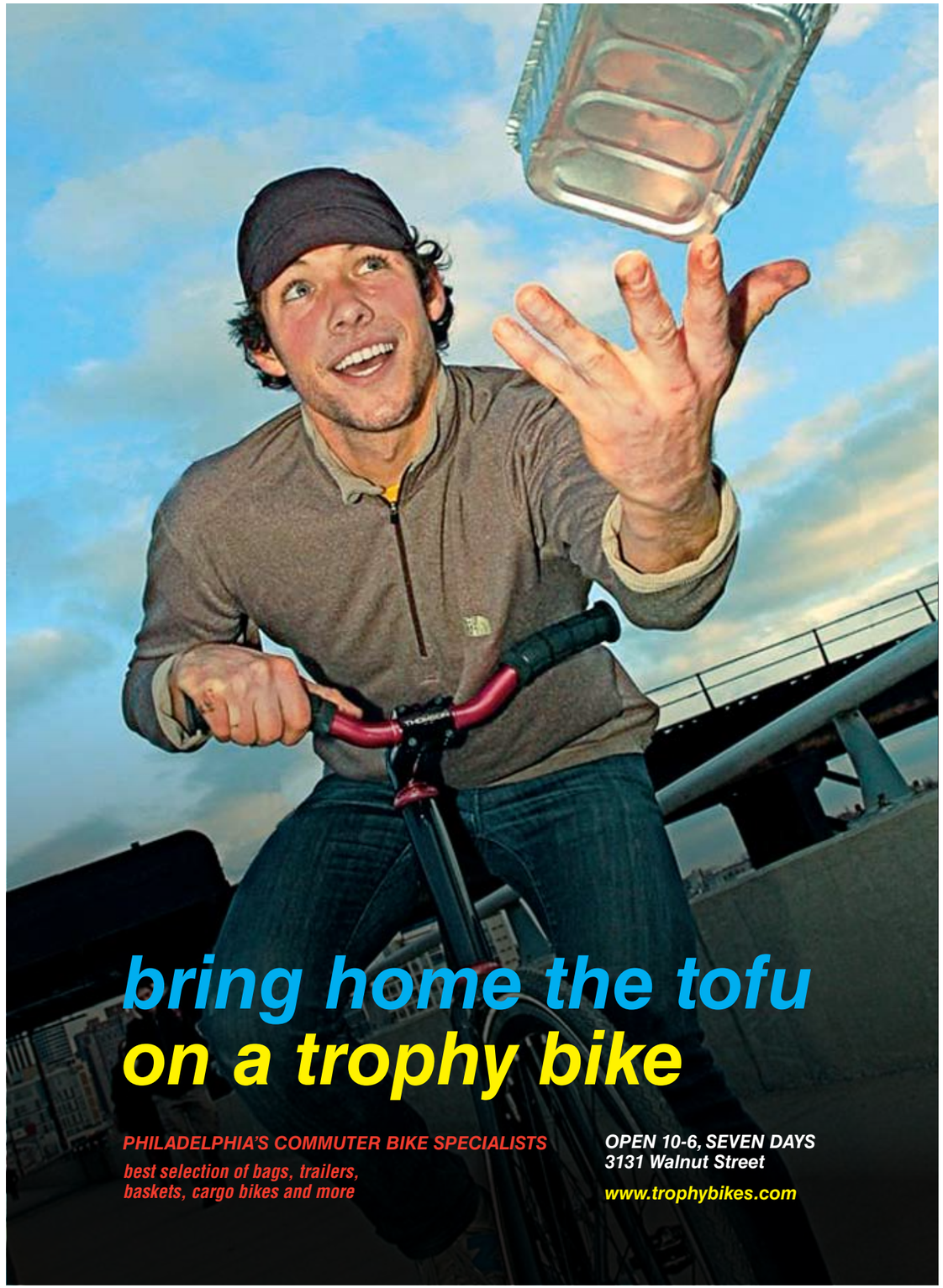
Vinylux—Vintage Vinyl Design 3

Germantown's Jeff Davis puts our nostalgia to good use, making homeware and decor, clocks, picture frames, jewelry and sketchbooks from LPs, 45s and album covers. Find his stuff at Jean-Jacques Gallery at 7118 Germantown Ave., AIA Bookstore at 1218 Arch St., the Black Cat at 3426 Sansom St., Intermission at 8405 Germantown Ave. and Susan's New Attic at 4359 Main St. www.vinylux.net

SECOND HAND SELECT

Plaid Pony Vintage 4

Anyone who has made it though a Philly winter knows that you need a little extra coverage. Lara Long sifts through bins of thrift so you don't have to. Her collection of brightly-colored knit hats and crocheted and plaid scarves can be found at www.plaidponyvintage.com



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MAKING IT HAPPEN

ALEXIS ROSENZWIEG

This POPPED! creator and organizer admits that today's music festivals aren't exactly sustainable endeavors, but that hasn't stopped her from trying. At last summer's festival, each recycling station was managed by a volunteer who informed festival-goers about proper recycling. Businesses and organizations were discouraged from passing out flyers and encouraged, instead, to present their information through alternative methods. Some vendors used informational videos, some text messaging and others promoted themselves through contests and giveaways. Production and sound companies, as well as all employees, were Philadelphia-based. "Sustainability, to me, is not just recycling and using less energy," Alexis explains. "It's also taking a big look at your lifestyle and focusing more on your local community."

Accessible by public transportation, POPPED! offered nutritious local foods, responsible water bottle disposal and local vendors. Alexis believes that integrating sustainability is ongoing, but very possible. Next year's plan includes investigating alternative energy sources, such as solar-powered stages and biodiesel generators, developing POPPED! recycling bins (which will be made available to other events for rental or purchase) and continuing to focus on the best Philadelphia has to offer. "It just takes time to build every year on your efforts," Alexis says.

STARTING UP

GreenSteps

Laura Blau taught energy savings to her six year old son, Nandor, using the green cloth dragon that hangs from his bedroom door. Every night, if Nandor's clothes are still clean, he puts them inside the dragon's pouches and wears them the next day. Overtime, Laura does less laundry and when she does, she uses cold water and line dries.

Now with GreenSteps, a project of BluPath Design, the LEED accredited architecture firm that Laura co-owns with husband Paul Thompson, she's showing the rest of Philly that saving energy can be simple and cheap. Putting a little effort into daily habits, Laura says, saves money, hassle and time better spent with family and friends. In addition to high-tech systems based remodeling and seminars on energy ratings, GreenSteps offers assistance with at-home energy thrift, green products and lifestyles, and web, book and periodical resources. Laura can show you how to energy-tighten your home, improve indoor air quality and orient a building towards the sun.

GreenSteps was first launched as Green Home Basics, a pilot program for Philadelphia University's continuing education where attendees brainstormed and developed personalized energy savings strategies. The course was so popular it continued the next semester and in the past few months, it's become a full-fledged business. They work with corporations as well as affordable housing agencies and community development corporations. Having spent over five years creating some of Philly's sustainable structures, including much of The UArts campus, Laura and Paul know it's not just buildings that need their help. "There's just so much info out there," Laura says. "People look at all that info and they just shut down. We're trying to guide them through the maze...We recognized that we needed to get things moving along a little faster than just one client at a time."

HARVESTING URBAN BRILLIANCE (H.U.B)

Old Pine Community Center

At the Old Pine Community Center, you can learn how to sew from the Philadelphia Sewing Collective, help rebuild a house with Habitat for Humanity, shoot a couple of hoops in their indoor gymnasium, attend a meeting for the Society Hill Civic Association or host a meeting of your own.
401 Lombard St., www.oldpine.org

ROSENZWIEG PHOTO BY SARAH GREEN

PHILLY'S GOT CULTURE

NEXUS RADIO

With TV waves going digital this February, Nexus/foundation, an experimental artist collective, thought it might be time to go old-school. So they turned their gallery, located in the Crane Arts Building (1400 N. American St.), into a low-frequency AM radio station for the months of December and January. Their control room, made of 100 percent salvaged materials, has chalked up two months of community- and arts-based programming. "When researching this project, we realized that radio's original use was to promote community broadcasting and community education," explains Nexus artist member, Bilwa .

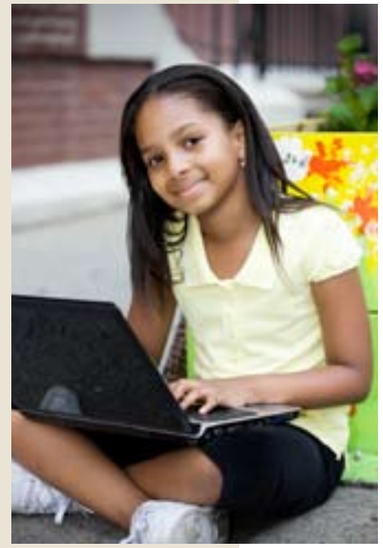
The December 11 opening reception served as an on-air party encouraging people to "bring your own shout-out." Anyone could go on air and indulge in some self-promotion. Planned broadcasting includes a show called "Open Borders," where students of North Philadelphia High School interview local immigrants. The station's also presenting original radio dramas like "Yard Songs," a history of trains and their effect on Philly neighborhoods, and "Pangea," an "Orson Welles-type" preview into the in-progress opera of Michael Mc Dermott, owner of the earSnake record label. Overall, Bilwa describes the radio project as "an ode to radio, by embracing technology that has fallen by the wayside." By tuning into 1650 AM on your radio, you might be able to hear some of technology's past, loaded with Philly's cultural future.

Radio, radio: AFA on NEXUSradio with Chris Golas and Jo DiGiuseppe

REACHING OUT

DIGITAL INCLUSION

People's Emergency Center Community Development Corporation



It's kind of hard to get a job without knowing how to type or use the Internet. Yet, despite our technologically-driven times, many Philadelphians are computer-starved—one more barrier to opportunity.

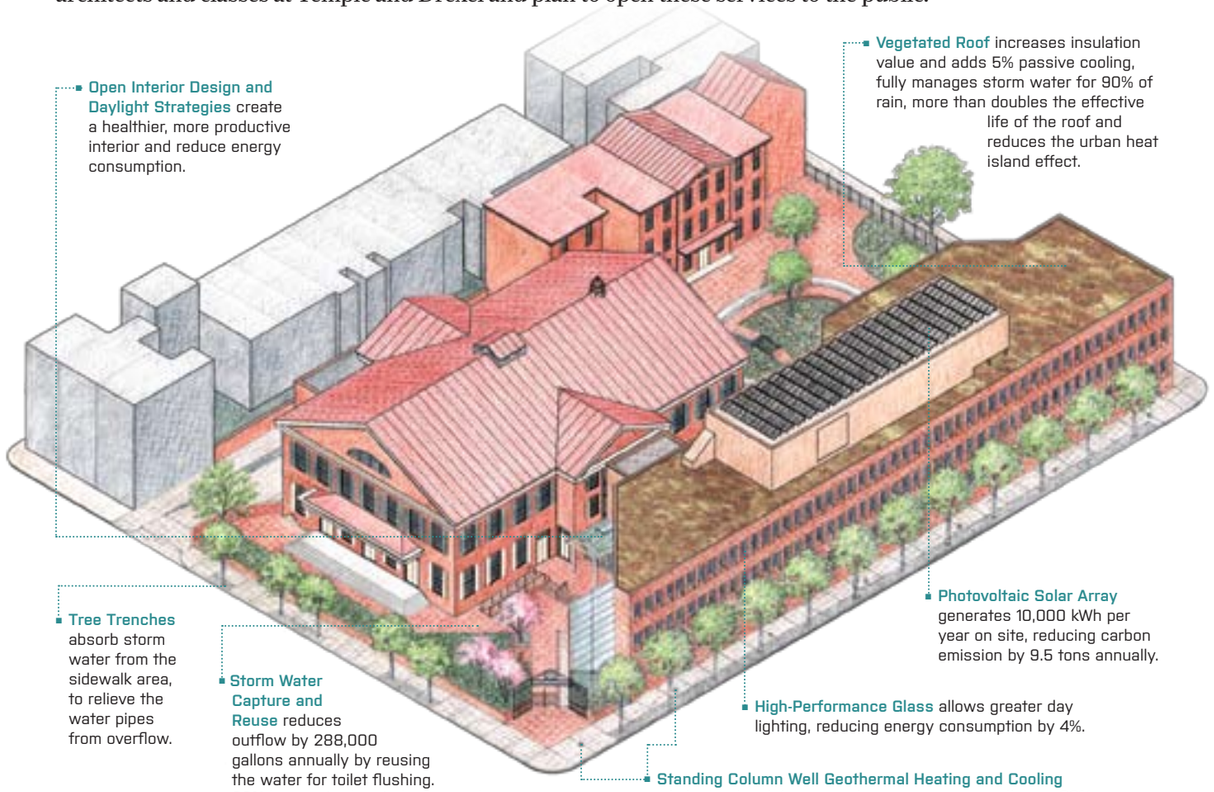
Working towards a technologically-capable West Philly, the People's Emergency Center Community Development Corporation (PECCDC) runs a digital inclusion program at their Families First Building (3939 Warren St.). For adults, there's a six-week class on basic computer skills. Upon completion, students receive a low-cost, refurbished and Internet-ready computer which would have otherwise ended up in the trash. Students also learn basic repairs and hardware replacement so they're able to maintain their computers. The youth program, Teen Technology, provides area schools with an after-school program that integrates math and reading practices into typing, online navigation and website creation. Around Powelton, it's a welcome addition. "It's all about positive out-of-school time," says Trish Downey of PECCDC. "I've seen a lot of kids considering college [enroll]in college or become career-oriented, and [learning how to use a computer] gave them the self-esteem and know-how to tackle it."

But the kids aren't the only ones benefiting. Many parents and grandparents have gained basic job skills and are now starting computer-based businesses and working from home, which is especially useful if you've got young children to watch. PECCDC began the program back in 2003 through partnerships with One Economy and United Way of Southeastern Pennsylvania. Last year, thanks to the donations of both the University of Pennsylvania's Communitech—part of Penn's school of engineering and applied sciences—and area residents, PECCDC got 192 refurbished, 'net-ready computers into the community. They've also gained a full-time volunteer courtesy of Americorp Vista. With growing interest in their program, PECCDC has come up short on one resource: volunteers to refurbish donated computers. If you're interested—even if you have no computer experience—call Bryan Mercer at 215.382.7522 x298.

structural

The Friends Center

RENOVATIONS OF the Friends Center, the first facility in Philadelphia to get its heat from deep-standing column wells (six holes drilled between 1,000–15,000 feet into the earth's core), are nearly two-thirds complete. When it opens this spring, the Center—which has a green roof, solar panels and was rebuilt with recycled and renewable materials—will be a grand achievement in sustainable design. They've already been giving tours to architects and classes at Temple and Drexel and plan to open these services to the public.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LEARN MORE www.friendscentercorp.org

social

SOLAR STATES

A lot of people talk about green jobs, but Solar States is poised to make them work. Partnering with the Science Leadership Academy, a science, tech and math-centered high school run by the Philadelphia School District and the Franklin Institute, Solar States plans to build and install solar systems in Philly by 2010. An engineering elective program at the SLA, with curriculum designed by Matt Van Kouwenberg, teaches students about solar energy systems by studying and building working ones themselves. So far the students have only been through one semester, but Solar States plans to start hiring the Philly kids once they graduate.

LEARN MORE www.solar-states.com
www.scienceleadership.org

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ILLLUSTRATION COURTESY OF FRIENDS CENTER

Flash of Hope

An ode to Frankford Ave. and the El

by NATHANIEL POPKIN

THE THIRD-FLOOR FACTORY WINDOW frames the view, the restive city in the side-glance of the winter sun. Here's a swollen plume of white smoke and the granite-colored river, and the Betsy Ross Bridge in the muted but improbable green invented by the Pennsylvania Railroad. Amtrak flies past. Gulls float above a scrap metal yard that faces funny little twin houses with gingerbread details along the roof line.

Downstairs, among the used car dealers, whose flags crack somberly in the wind, there are side yard body shops and women whose carved faces betray hunger and addiction. There are cemeteries, too, in this part of Frankford, and magnolia trees replete with thick, fuzzy buds, and stone walls, and dormer windows, and street names—Orchard, Cloud, Pear—as old and evocative as anything in Society Hill.

This ancient streetscape compels newcomers, among them a handful of renovators who are drawn by a beauty here they say they can't find elsewhere. They see the neighborhood as a lush hope, and they wonder constantly, obsessively, how it fits into a city yet reinventing itself. I stand before the window with one of them, Charlie Abdo, who has put his careful stamp on buildings across Philadelphia. He'd never thought much about Frankford before. Now a funny little Victorian house on Church Street dances before his eyes. "We came here a bunch of times; by the eighth time I was sold," he says. These days he spends his time in the frigid labyrinthine skeleton of the Globe Dye Works, carving space, stepping gingerly forward.

Across the cement factory floor, the window gazes back toward Frankford Avenue; only the London plane trees are tall enough to profit from the low morning light. They reach over the two-story rowhomes, over the workshops, over the silence just now pierced by the flash of the El. It comes every ten minutes, hour after hour, its bellow insistent, its presence persistent.

The El is the fastest and most efficient means of transportation in Philadelphia; it carries more people than any other line by far, and it connects otherwise disparate places. Once, about 100 years ago, planners envisioned a dozen such lines, but only the El and the Broad Street Subway would emerge. The rest of the sprawling architecture of a cosmopolitan city was lost to small thinking, infighting and corruption.

It's taken almost three decades to rebuild the El, a process so immense and slow, and managed so poorly, that it put countless stores out of business. In Frankford, the project started in the middle of a substantial suburban exodus. SEPTA came along as a bloated undertaker, to bury the avenue once and forever. The lackluster Frankford Terminal, completed in 2003, only reinforced the sense of urban defeat.

Now the faces on Frankford Avenue are circumspect, and many storefronts are empty. Otherwise, there are numerous African braiding salons, a pair of soul food restaurants, a store that sells parakeets and other domestic birds and an antiques dealer who specializes in mid-century modern. Thanks to the recently revived Special Services District, the sidewalks are clean; there are bright blue trash cans at every corner.

And there is the El. With three stops, Frankford is among the most connected, accessible places in Philadelphia. It moves. What's felt for so long like a disadvantage—the light-blocking hulk that drove business and people away—is now perhaps Frankford's greatest asset. That's what Abdo and his partners say. They point to Frankford Avenue and explain, *We have this*. Says Jim McCarthy, who heads up the Special Services District, "When gas prices start to go up again—well, nothing beats it. A dollar-fifty, you go anywhere you want to go." ■

ILLUSTRATION BY PAT KINSELLA

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Girl's Best Friend

The For My Daughter Library offers a safe place for young women to be themselves

by DESTINEE-CHARISSE ROYAL

AROUND 3 P.M., THE girls trickle through the front door of a former upholstery shop. From public and private schools in Germantown, Mount Airy and beyond, they arrive in pleated skirts and blue jeans. Yvonne Haughton welcomes each by name as they shed jackets and knapsacks before helping themselves to pudding and hot chocolate.

Giggles, repressed all day in a classroom, now escape between sunshine yellow walls. Homework starts on loose leaf and laptops. The girls settle into seats plucked from Craigslist and FreeCycle. Shelves, lined two-deep with gently used hardcovers and paperbacks, are labeled by categories, bookstore-style.

This is the For My Daughter Library—a study lounge, afterschool program and safe haven for girls ages eight to 14. Set in a Germantown Ave. storefront and designed using environmental principles, the space opened in October. Here, there are no librarians to hush students. In fact, it's meant to be a place where a girl can find her voice.

Yvonne, 49, who has taught third through fifth grades, says she made the library girl-only to reduce some of the pressure and competition that comes with co-ed education. At her library, you don't have to raise your hand before speaking, she explains, because this is not school.

> Young people are resources. We can let them go to waste or let them become something useful and productive.
>
> → Yvonne Haughton, *For My Daughter Library*

Yvonne's vision came in the summer, when a car accident left her recovering at home on doctor's orders and she consumed more TV and Internet than usual. She saw hard-hitting statistics about misogynistic violence, new cases of HIV/AIDS in young African-American women and poor literacy of city high school graduates. Meanwhile, in what she calls a "door/window thing," she was fired for missing work from her job as a human resource manager.

"So here I am with all these problems that I'm looking at and a house full of books that I'll never put my hands on—I like to read children's books because they're soothing—and my daughter said, 'You need to do something!'" Yvonne recalls.

Once the library idea was set, Yvonne's daughter, Danielle, 23, who catalogs the books, had another suggestion.

"She said, 'You should make the library green-friendly.' I said, 'Yeah? What does that mean?' and she said, 'Here!' and she gave me a couple of books," said Yvonne, laughing.

With her retirement travel fund, Yvonne purchased used books and furniture at thrift stores, yard sales, adding to her "little hodgepodge of comfort." Local workers made renovations and painted the walls with low-VOC (volatile organic compound) paint.

"I didn't want to buy new things because I wanted to prevent us from contributing further to [the creation of] new products," Yvonne says. "That would mean the destruction of old products that were perfectly OK."

Yvonne has invited professionals who have voluntarily conducted workshops in crocheting, bully prevention, mask-making and other skills. Through its affiliation with The Coalition, Inc., an organization of community groups, she's made contacts and spread the word about the library.

"I reach out to anyone who wants to make [the girls] feel important, special, appreciated, understood, relevant, and just themselves," she says. "I don't think one person or one place can give them everything that they need."

The library can accommodate 15 girls, and six to 13 students spend time there on a given afternoon. Yvonne calls each girl "Princess" and says she wants to keep the program small so each child feels that she belongs.

"Young people are resources. We can let them go to waste or let them become something useful and productive—just like our goods, just like our services," she says. "I just want to do a little bit of that."

PHOTOS BY SARAH GREEN

Waste Not!

Biogas technology will save Philly some serious money

by MATT JAKUBOWSKI

BIOGAS ISN'T SEXY. There are no sleek silver solar panels, no turbines on a windswept hill. It's a part of your regular routine, but we're only beginning to tap into its explosive potential. Biogas generation, the unmentionable alternative, uses methane, a potent greenhouse gas that comes from our garbage and our raw sewage, to power engines. It's already used in the United States, and it's sure to be an inexhaustible supply of energy—and bad jokes—for decades to come.

Alfred Wanner, a dairy farmer in nearby Narvon, PA, is reaping the benefits of the $1 million biogas system he installed in July 2007. Built with personal funds, as well as state and national energy grants, Wanner's facility generates about 125 kilowatts each hour using purified methane from the manure of his 600 Holstein cows. The system powers much of his equipment and heats water to clean his milkhouse. By using the dried, solid byproduct as bedding for his herd and the liquid byproduct to fertilize his field, Wanner's been able to switch to an electric sprayer and put two diesel-powered tractors to rest.

You don't have to own cows to get energy from excrement, though. The Philadelphia Water Department has big plans to drop on the Northeast. According to Dr. Chris Crockett, Director of Planning and Research for the Water Department, the utility company will break ground on a $10 million biogas cogeneration facility at the Northeast Sewage Treatment Plant, one of Philly's largest. It's ripe with more than 188 million gallons of wastewater processed daily. They currently use seven to eight megawatts of energy to process the wastewater, but the new biogas facility, which should be cranking out power by early 2010, will run four one-megawatt generators, reducing the plant's electricity usage by 50 percent.

The costly project got a boost from a $500,000 state energy grant. But Crockett said that if peak energy production is maintained, the facility could pay for itself in five years—that's without factoring projected increases in power bills.

"We think it's one of the best things to do and the right thing to do," Crockett says. "Something we've been hoping to do for a long time."

Currently, the Water Department flares off unused impure methane and pipes some of it back inside the plant to fuel the burners. Along the way, some methane invariably escapes. With the new biogas cogeneration facility, nearly all the methane produced at the Northeast Plant will be captured and piped over to a new mini-refinery, which will remove water, hydrogen sulfide, siloxanes and other impurities from the methane. The pure methane will power the four large new generators, producing electricity for the plant, and heat coming off the generators will be directed back to the digester tanks where the wastewater sludge is processed.

Besides cost savings and a reduced carbon footprint, Crockett says that the plant's new methane-powered generators could act as an emergency backup system to help the plant "limp along" and keep treating wastewater during long power outages. Crockett is such a believer in wastewater's potential that he calls it "black gold."

"Theoretically," he says, "wastewater contains 10 times more energy than the amount of energy we put into treating it."

As the energy crisis deepens, renewable energy will continue to gain interest. We've already seen commercials touting the importance of alternative energy to save America's environment and make us energy-independent. Soon, we may see ads urging us all to do our patriotic doo-duty and spend a little more time in the bathroom.

COMPOSTING SOLUTIONS

by TANYA SEAMAN

Methane has 72 times the global warming power of carbon, according to the National Oceanic and Atmospheric Administration, and it isn't just buried in our sewage pipes—it's exposed in our landfills. Trashed organic matter (think orange peels, coffee grinds, leftovers, dried leaves and grass clippings) decomposes in airtight landfill layers, creating the harmful gas.

That same organic matter could be useful. Composting, an alternative to dumping, turns organic matter into nutrient-rich fertilizer instead. The new soil can nourish our gardens or be sold to local farmers—cutting down on their supply shipments and our food costs—to fortify the foods we eat.

It's a small-scale, satisfying solution. And it's simple. All you need is space, a large, perforated container (trash can with holes) and scraps of food. Maintenance is as easy as adding water and shaking up the contents. Philly's already made composting efforts through Fairmount Park, White Dog Café's partnership with University City High's urban garden and free composting classes taught by Marlene Buck of New Kensington CDC. The Recycling Alliance, aided by RecycleNOW, has been pushing for composting facilities similar to San Fransisco's. Toronto has led an effective Green Bin program, which picks up discarded organic matter separately. With 90 percent participation from single-family homes, Toronto has cut waste by 42 percent, saving tax dollars by sending 2,750 fewer trucks to landfills each year.

Philly, which has only recently adopted single stream recycling, may seem behind but composting doesn't require much. We have gardening experts, vacant lots and plenty of food scraps in our homes and eateries. By creating larger, organized efforts, we can turn a tired old problem into new, practical production.

LEARN MORE www.compost-info-guide.com
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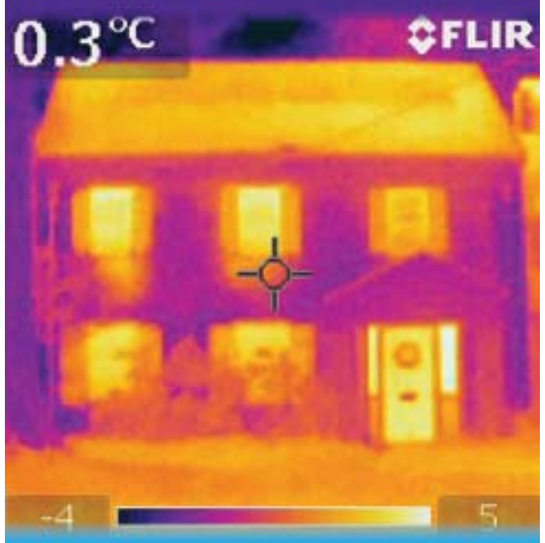

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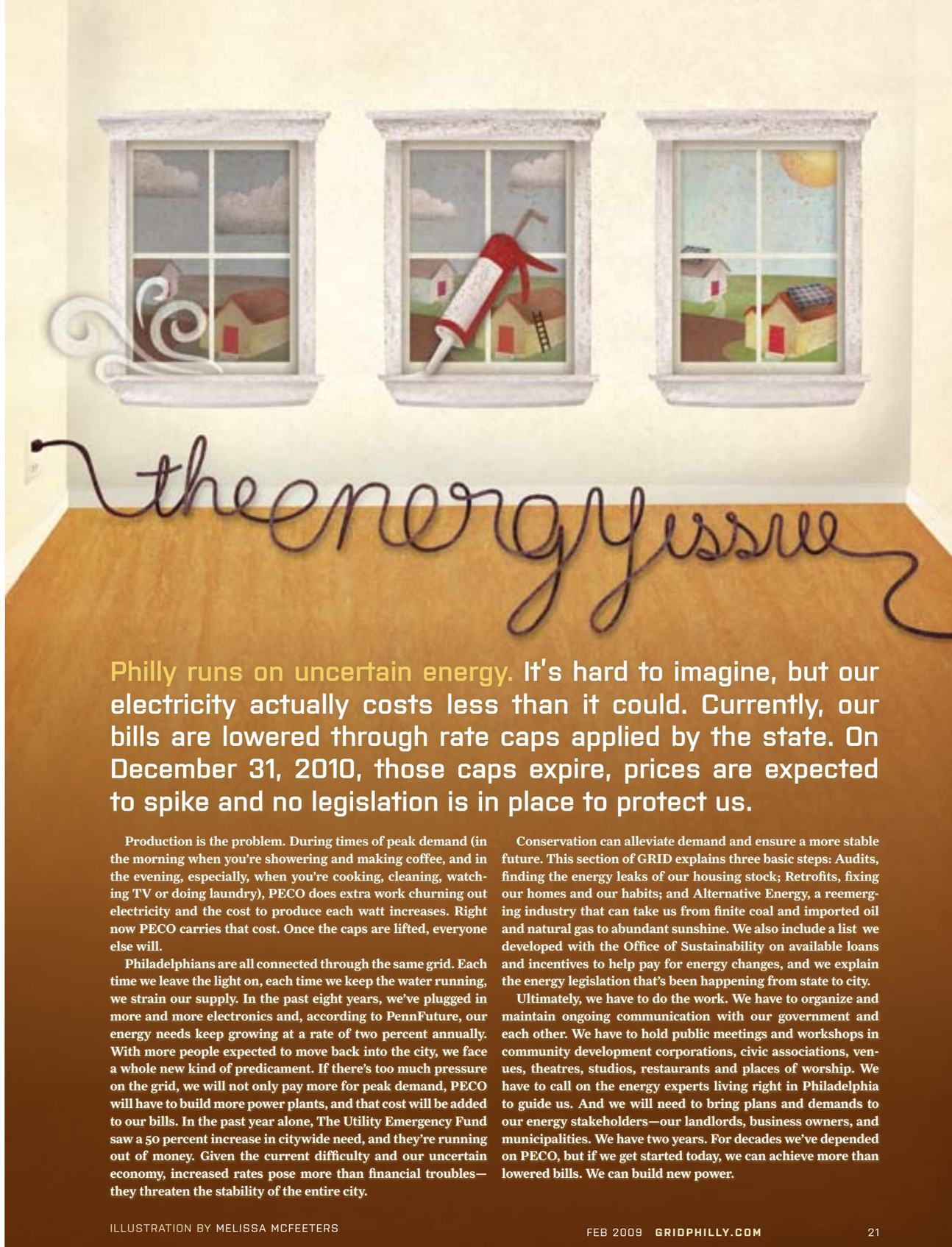


Philly runs on uncertain energy. It's hard to imagine, but our electricity actually costs less than it could. Currently, our bills are lowered through rate caps applied by the state. On December 31, 2010, those caps expire, prices are expected to spike and no legislation is in place to protect us.

Production is the problem. During times of peak demand (in the morning when you're showering and making coffee, and in the evening, especially, when you're cooking, cleaning, watching TV or doing laundry), PECO does extra work churning out electricity and the cost to produce each watt increases. Right now PECO carries that cost. Once the caps are lifted, everyone else will.

Philadelphians are all connected through the same grid. Each time we leave the light on, each time we keep the water running, we strain our supply. In the past eight years, we've plugged in more and more electronics and, according to PennFuture, our energy needs keep growing at a rate of two percent annually. With more people expected to move back into the city, we face a whole new kind of predicament. If there's too much pressure on the grid, we will not only pay more for peak demand, PECO will have to build more power plants, and that cost will be added to our bills. In the past year alone, The Utility Emergency Fund saw a 50 percent increase in citywide need, and they're running out of money. Given the current difficulty and our uncertain economy, increased rates pose more than financial troubles—they threaten the stability of the entire city.

Conservation can alleviate demand and ensure a more stable future. This section of GRID explains three basic steps: Audits, finding the energy leaks of our housing stock; Retrofits, fixing our homes and our habits; and Alternative Energy, a reemerging industry that can take us from finite coal and imported oil and natural gas to abundant sunshine. We also include a list we developed with the Office of Sustainability on available loans and incentives to help pay for energy changes, and we explain the energy legislation that's been happening from state to city.

Ultimately, we have to do the work. We have to organize and maintain ongoing communication with our government and each other. We have to hold public meetings and workshops in community development corporations, civic associations, venues, theatres, studios, restaurants and places of worship. We have to call on the energy experts living right in Philadelphia to guide us. And we will need to bring plans and demands to our energy stakeholders—our landlords, business owners, and municipalities. We have two years. For decades we've depended on PECO, but if we get started today, we can achieve more than lowered bills. We can build new power.

ILLUSTRATION BY MELISSA MCFEETERS

This Old, Audited House

Audits uncover energy leaks in a Philly rowhome

by WILL DEAN

On a brisk December morning, a white van pulls up outside a quaint, stone-fronted, two-story duplex rowhome in Mount Airy. There are a few people inside, myself included, and some ghost-buster-esque equipment, including fans, various detectors, meters and a big fan. The only invisible thing we're hunting, though, is heat. We're doing an energy audit.

An audit is a series of tests an experienced tech can perform on your abode to find out exactly where your house is wasting energy—and costing you money.

Chris Robinson has been doing energy audits for two years and works for the Energy Coordinating Agency, a local energy nonprofit that conducts energy audits and helps low-income residents make their homes more efficient.

He's a house mechanic and knows that lack of proper insulation is plaguing Philly's housing stock. "Typically homeowners think their house is drafty because of windows," Chris says. "Often, it is actually lack of insulation."

Chris starts the audit with some questions about bills, any obvious problems (like a leaky roof) and when work was last done. Then he breaks out the equipment.

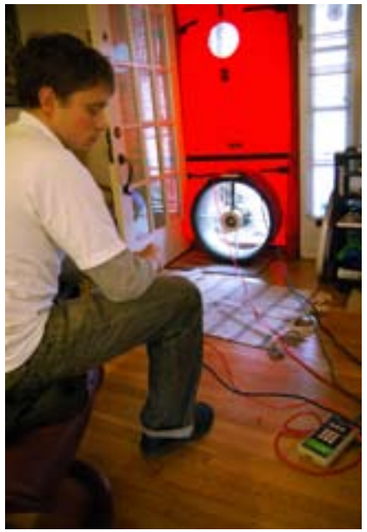
There's a lot of science to an energy audit; it's like a check-up for your house, complete with fancy gizmos and meters and prescriptions of how to fix things.

Chris opens the front door, sets up a frame and covers it with a sheet of red plastic with a round hole for an industrial fan. This is the blower door test, which is used to find leaks in the house. The fan rumbles to life and a slight breeze picks up and lightly brushes my face. Checking a glowing green readout on a hand-held pressure sensor, Chris half-shouts, "We're depressurizing the house to -50 pascals [a unit of air pressure] so we can find out how much air usually moves in and out of the house."

He leads us up the stairs to explore the leakiness of individual rooms. With the fan pulling air out of the house, outside air rushes in and any leak is magnified a hundred times.

The bedroom, which the homeowner says gets very cold, is pouring enough air into the hallway to ruffle hair. The problems in the room are like many houses in the city. Old jalousie windows—which have multiple overlapping panes and often date back to the house's construction in the late '20s—are leaking cold air. In addition, the entire room is a knee wall joint (see sidebar), and the baseboards are not well-insulated. A window-mounted air conditioning unit lets more air in through its vents.

After we check the furnace and hot water heater for efficiency and safety, and look at a few more obvious leaks, Chris makes some recommendations. Later he will write up a report for a contractor to fix the drafts.



Even with the bedroom leaks, the house is in pretty good shape, thanks to the benefits of the most common Philly housing design, the rowhome.

Shared walls are always good for efficiency, and the simple unadorned construction can be very effective if sealed properly. The most efficient house Chris ever saw was a small rowhome in North Philly. "It was just this little box rowhome in Kensington," he says. "I did all the tests and told her, 'Well, there's nothing I can actually do; you're doing great.'"

For the most part, though, Philly's aging house stock could use some help, and energy audits are the best way to start. The ECA estimates that many homes in Philly could save up to 60 percent off their bill by tightening the building envelope. A lot of that is in simple insulation fixes and replacing aging components.

You might be able to find help, too. The ECA is part of a federal pilot program called Home Performance with EnergyStar that funds the first 50 energy audits if the homeowners start repair work. They hope Pennsylvania will fund energy audits in the near future.

Even if you do end up paying for it, the savings on your bills will make up for the price in a couple years. They might let you use all the cool equipment, too.

Common Problems for Philly's Homes

Knee Wall Joints: Any section of the house that extends beyond the normal housing envelope (like windows on a sloping roof) is often not completely insulated and can easily lose a great deal of heat.

Attic Insulation: You should have at least a foot of insulation, depending on the type, in your attic.

Windows and Doors: Old windows and doors can leak air through cracks and poor materials. Newer designs prevent heat loss with insulated and non-heat-conductive materials.

Balloon Framing: Many old houses were built around giant vertical beams, as opposed to walls, and this can create causeways for air to move between the basement and attic, and then out of the house. Look for gaps where the floor or ceiling do not meet snugly with the walls and seal them with insulation.

Lacking an energy audit!

PHOTOS BY SARAH GREEN

Warm Your Home, Keep Your Cash

Efficiency tips save energy and dollars

According to the Energy Coordinating Agency, most of Philly's aging housing could use around 40 to 60 percent less energy, but it will require more than just changing light bulbs. Many solutions are simple DIY projects, but larger projects carry some risk. Insulation, for example, can cause moisture build-up (and thus mold) and dangerous levels of contaminants like radon and carbon monoxide. It's always best to consult a professional first.

Start by sealing any obvious openings. All holes, cracks and loose joints need low VOC (volatile organic compound) caulk. Use removable sealant on window frames and door perimeters and put a plastic sheet on the window's surface. Most energy experts will also tell you that cutting consumption starts with habit. Just turning your thermostat down one degree can cut utility costs by three percent. An extra sweater and electric blankets are great, but also try installing a programmable thermostat. Turn off lights, keep appliances unplugged and consider the number of watts before plugging in. Energy is also wasted through the water heater—it runs at maximum temperature and then uses more energy to cool down for use. In general, water thrift, i.e. short showers and air-drying your laundry, is also effective.

EXPERTS' TOP TIPS

- ✔ Wrap hot water pipes and older water heaters (read the manual; newer ones don't need it) with insulation using kits like TierraPath's, pre-cut tubes for the pipes, or small rolls of insulation.

  —Chris Robinson, *Energy Coordinating Agency*

- ✔ Rigid insulation panels, Super-Tuff-R or Thermmax, can be cut with a utility knife and attached behind radiators to keep heat in your rooms, not your walls.

  —Don Hull, *Ground Source HVAC*

- ✔ If your HVAC ductwork goes through unheated spaces, seal it with rolls of insulation, like the Reflectix foil-faced kind.

  —Judy Robinson, *Continuum Architecture*

- ✔ Before sealing up, get a combustion analysis on your heating and water systems.

  —Sean Crane, *Hometown Green*

- ✔ Caulk the edges of your electrical outlets.

- ✔ Seal ductwork edges with aluminum metal duct tape.

  —Laura Blau, *BluPath Design, GreenSteps*

- ✔ Use glass door fire screens for any fireplaces.

- ✔ Open south-facing shades for sunlight exposure, while keeping all other drapes closed.

  —Lynne Templeton, *Greenable*

- ✔ If your water heater is reaching retirement age, replace it with a tankless instant-on system, which uses 25 percent less energy.

  —Dan Orzech, *Earth Rising Homes*

- ✔ Sealing up the house for efficiency can increase the concentration of any existing pollutants Make sure you have a carbon monoxide detector that has a UL (Underwriters Laboratory) 2034 certification.

  —Jim Quigley, *Healthy Spaces*

GET HELP!

Go to your local civic, neighborhood or business association, church, or CDC and ask them to contact an area efficiency expert to hold a workshop for your community. Visit www.energystar.gov, www.energywisepa.org, www.diynetwork.com or the National Energy Savers Blog: www.eere.typepad.com/energysavers

EFFICIENCY PURCHASES

Windows and Doors: Windows with multiple argon-filled panes create an effective barrier. Vinyl and fiberglass frames transmit less heat to the outside and low-emissivity (low-E) coated glass traps in heat waves from sunlight. Newer doors have multiple panes of insulated glass and are made with insulated materials, like fiberglass, wood cladding and steel with a polyurethane core.

Insulation: Use soy-based foam spray to fill gaps between the ceiling and wall of your basement. Add insulation made of cellulose (recycled newspaper) or cotton (old blue jeans) to your attic floor and inside walls by cutting a hole in the plaster or sheet rock. Home improvement stores will usually rent a blower or sprayer.

Heater: Once your house is tight, get a smaller heating system. Ask the contractor for a design load calculation, which gives an idea of how much heat your house needs. EnergyStar products—particularly condensing furnaces, with over 90 percent Annual Fuel Utilization Efficiency—are more expensive, but the most efficient.

Need supplies? Reacquaint yourself with your friendly neighborhood hardware store.

Monarch Hardware
4502 Walnut St.
215.386.8364

10th Street Hardware
257 S. 10th St.
215.922.0720

Rittenhouse Hardware
2001 Pine St.
215.735.6311

Fairmount Ace Hardware
2003 Fairmount Ave.
215.765.4500

Olde City Hardware
41 S. 3rd St.
215.413.3334

Stanley's Hardware
5555 Ridge Ave.
215.482.1200

Ritner Hardware
1641 W. Ritner St.
215.334.4927

Black Star Hardware
503 N. 33d St.

Kessler Supply Co.
1204 W. Girard Ave.
215.763.3600

The Environmental Home Store
550 Carpenter Ln.
215.844.4733

Greenables
126 Market St.
215.922.6066

The Green Depot
6951 State Rd.
215.333.3810

SUN CITY

Alternative energy entrepreneur Mike McKinley talks about what solar can do for Philly

STORY BY DANA HENRY
PHOTOS BY JON PUSHNIK

MIKE MCKINLEY WAS A COGNITIVE NEUROSCIENTIST working for Pfizer in southern California when the lights went out. Utility spikes caused by the deregulations of Enron and Reliant Energy (the same will happen with PECO in 2010) had led to a series of rolling blackouts better known as the California Electricity Crisis of 2000. When the lights came back on, Mike had electric bills of over $300 a month for a 750 square foot apartment. He also had a new outlook. The Philadelphia native and graduate of Central High School decided it was time for a career change. He commuted to New York and went back to school for solar technology.

Mike's instincts were spot-on. According to Solarbuzz, an international solar energy research and consulting firm, the number of solar installations worldwide continues to grow 20 to 25 percent annually. As increased demand drives prices down, new legislation has spurred rapidly progressive changes in federal and state incentives, grants and loan programs, making solar more popular than ever. In the United States, the number of solar manufacturing companies increased by more than 30 percent from 2005 to 2006, according to the Energy Information Administration. Here in Philly, Mike's three-year-old, full-service photovoltaic solar installation company, Solaris Energy, stands among Eos Energy, Solardelphia and U.S. Green Home in bringing us solar energy solutions. But providing is only part of the process. Education and political engagement push our energy independence forward, and to that end, Mike is also an activist. He's worked with PennFuture on promoting energy-wise legislation, attends clean energy conferences in Harrisburg and has founded the energy-wise initiative No Libs Green. And Mike talks—to audiences at Mixed Greens (a speaker series of the Alliance for a Sustainable Future-hosted STUDIOETC in Exton), at public events, to housing and condo associations, and to just about anyone else with a question.

Between a job in Ambler and another out in the 'burbs, Mike found time to roll into Soy Café in Northern Liberties and talk with *Grid* about what this blossoming industry means for Philadelphia.

When did you know that solar was your calling?
My first science project, as a kid, was a solar panel hooked into a fan. As an adult, I read the first IPCC (Intergovernmental Panel on Climate Change) report and like a lot of people, especially scientists, I saw a challenge unlike any we've seen before and a complacency about said challenge. I figured you can talk about it or you can do it, so I took the challenge on.

What drew you to the activism side of alternative energy?
I worked in a nonprofit for a little while in a small program delivering food. From that I learned that as much as I hate politics and the political arena, it's our duty as citizens to get involved; it's our right to get involved. I did my research. I looked into what was going on in the state and I figured, why not start at home? [➜]

What drew you to solar?
Too many things were pointing in that direction. In Pennsylvania we have an economic crisis that's been happening for decades, and we live in a coal state. Coal drives the energy—not only for us, but we export energy fueled by coal to other states and it's contributed to increased asthma and other problems that are too numerous to mention. We have a crime problem because these kids don't know what to do with themselves. If they actually had something to do that was futuristic and forward-thinking and responsible, think about where these kids lives would go. It's not really just about people saving money; it's not just about climate change; it's not just about our economy in Philadelphia—not to mention nationally. It's about all of it. Ultimately, all these things lead to our survival, from climate change—which can eradicate us as a species—to even our day-to-day worries as people. It's not a panacea. There's going to need to be reworking on the legislative level, the infrastructure level, even our outlook and our own personal habits. But the moment you realize that something like this is possible is the moment you realize you've got to get off your ass and do something.

What's changed since you've been in the alternative energy business?
Over the last three years, I've seen wind farms go up. I've seen a small company, Community Energy, blossom into PECO Wind. I've seen, finally, the passage of some smart legislation that gives people some choices in how they use energy. More importantly, despite our financial crisis, I see people thinking about a cleaner, greener, more responsible world and a more responsible economy. Philadelphia has [elected] a mayor who actually knows something about climate change and has been proactive about promoting legislation and about educating himself on the processes and about what he needs to do to establish the infrastructure. The IBEW [International Brotherhood of Electrical Workers] is starting to implement programs to teach their people about solar. Plumbers unions are starting to take it on. I'm tickled just thinking about what the next few years can bring.

What advice do you have for someone who wants to get started in the solar business?
Get your education. At our company, education is first and foremost. It's going to keep you safe; it's going to keep you well-versed. One thing that I want to avoid is what happened with the first solar boom [in the '70s]. People took a little bit of information, and ran a long way with it, and I think that it hurt the industry. So now I think that we should be very careful and promote education first. Professional development in solar is a daily activity. Get on the SEIA website [Solar Energy Industry Association: www.seia.org], then find a class.

There's also a lot of anxiety out there. People are wondering, "So when is this all going to happen?"
That's the question we should be asking our legislators. That's the question we should be yelling out at City Council meetings. That's the question we should be asking our senators and representatives. Don't ask me. Ask them. They're the ones holding the purse strings. They're the ones who give incentives to coal-fired electricity. The same incentives can be applied directly or indirectly to allow you the choice you want to make.

So what does this mean for Philadelphians?
We have a very unique opportunity. We as a city have always been green; we've always had a naturalistic bent. All we need now is the will, and the political will. I'd say it starts at home, starts with switching off your lights. Starts with really looking at your PECO bill and not just the number in the upper right hand corner. Take a look at how much electricity you're using. Take a look at how much gas you're using. Be aware of your own habits and change them. Next, go to your legislators and make them aware of their habits. With the right legislation, the right will and the right activism, we can be the greenest city; and more than that ,we can become a model for other cities.

What does this mean for our independence?
Let's say, out of 300 issues of the *Daily News*, 20 have something to do with PECO or PGW—either rate hikes, shutoffs [or] transformer issues. What if we made our own energy for ourselves from a completely renewable source? [It would be] like making our own water. There's something to be said about any independence, and energy independence most strongly. ■

FULL POWER PHILLY

As long as there's sun in the sky, photo-voltaic solar technology will be key. But it's not the only option. Here are some other companies making the most of our renewable supplies.

Ground Source HAVC Don Hall will help fix your house. Not literally, but this geothermal guy has some house-tightening tricks that will allow you to install the smallest, most affordable geothermal pumping system possible. How does it work? By drilling a hole into the ground, Don can generate enough energy from earth's thermal core to heat and cool your house year 'round.

Ruthford Solar This company focuses on solar water heaters. Might not seem like much, but solar hot water is actually the simplest, most cost-effective transition to renewable supply. That's because heating water, unlike creating electric current, does not require a conductor. It's done through passive solar and works just like a magnifying glass held over a bug.

Hanly Oil Provides area homes with bioheating oil. If you have an oil furnace, this is a veggie-based alternative to petroleum.

PHOTOS BY JON PUSHNIK

Paying For It

Affording Energy Efficiency using Loans, Grants, and Incentives

by GRID STAFF *and the* OFFICE OF SUSTAINABILITY

There's more available assistance for making your home or business energy efficient than ever before and we're certain to see more in the coming years. Costs for solar has also decreased dramatically. In 1979 it cost $4 to produce a kilowatt hour of electricity from solar, today it costs just 28 cents. But perhaps the best incentive, when it comes to alternative energy, is the reduction or elimination of your utility bills—not to mention the added value to your home or building. Here's a quick list of energy related programs that are or will soon become available:

A new statewide website, www.energywisePA.org, has the latest on energy conservation programs. The Office of Sustainability is also launching a website to help you make energy changes.

Federal Tax Incentives
Investment Tax Credit, a federal tax incentive passed in 2005, was extended for 8 years by the $700 billion bailout package passed in October, 2008. The tax credit includes efficiency incentivizes for home retrofits including sealing, window replacement, energy efficient appliance replacement, energy efficient renovations, and pigmented metal roofs or asphalt roofs with cooling granules. You can get up to 30 percent of the cost covered as a tax credit on renewable energy systems. There is no price cap on photovoltaic solar systems; a $2,000 cap for solar water heating systems; $4,000 on wind; $2,000 on geothermal. www.energytaxincentives.org.

Grants
Weatherization Assistance Program is federal money to increase the energy efficiency in your home. Income standards are similar to LIHEAP. Expected to expand during the next administration Go to: http://apps1.eere.energy.gov/weatherization/or contact Karl (Tony) Kimmel at 717.720.7439 or kkimmel@state.pa.us

Loans
Philadelphia city residents making energy efficiency improvements can qualify for loans of up to $25,000 (with up to 20 year terms) through the Philadelphia Home Improvement Loan program. Interest rates are low and usually tax deductible. Administered by PNC Bank, Citizens Bank and TD Commerce Bank. www.philaloan.com

Keystone Home Energy Loan Program offers low-interest loans funded by the Penn. Treasury Dept. for home efficiency projects and the installation of alternative systems. Managed by AFC First, a private lender. www.keystoneHELP.com

Energy Efficient and Alternative Energy Mortgages by Fannie and Freddie Mac help you finance improvements. Complete guide with list of providers at www.energywisepa.org

Private lenders for energy efficiency and alternative energy improvements include PNC and Beneficial Bank.

Sustainable Development Fund, through The Reinvestment Fund, offers loans of $50,000 up to $1,000,000 for high performance energy conservation. If you plan to renovating or rebuilding a charter school, daycare, public or commercial facility, small or medium business or are developing affordable housing, you may be eligible. Contact Robert Sanders at Robert.Sanders@trfund.com

Small Business and Residential Assistance:
Environmental Management Assistance Program (EMAP), through the Small Business Development Corp. at Wharton, provides free consultations, seminars, audits, and assistance developing and funding efficiency plan services to small businesses. 215.898.4861, emap@wharton.upenn.edu

Energy Coordinating Agency offers free house audits and assistance with energy efficiency projects to residents who qualify. 215.988.0929, www.ecasavesenergy.org/

NoLibs Green offers free energy audits to businesses in Northern Liberties. http://nolibs.com/green.asp

Many community development corporations offer guidance. Check with your local CDC.

Soon to Come
Pennsylvania House Bill 1, now Act 129, will provide significant investment in energy efficiency, conservation, weatherization, solar and other renewables. Includes:

Alternative Energy Investment Fund will provide rebates, grants and incentives for local businesses and governments to start renewable (non-solar) projects.

Pennsylvania Sunshine Program will provide rebates of up to 35 percent for residential and commercial solar system installation and grants and loans for solar industry businesses.

The first programs for homeowners and small businesses are expected to roll out in February. Sign up for e-mail updates at www.ahs2.dep.state.pa.us/aeifsignup/

If You Need Help Now
Low Income Home Energy Assistance Program (LIHEAP) can subsidize your heating bill during the winter and Crisis grants can help if you are in danger of losing service. For the 2008-09 season, the income bar rose (for example a family of 4 making less than $44,443 now qualifies) so make sure to apply now. 866-857-7095, www.liheap.org ■

Myths and Facts about Energy

Natural forms of energy are literally all around us, along with plenty of misconceptions and about them. Here are some straight facts about renewable energy:

MYTH Pennsylvania doesn't get enough sun for solar. FACT 60 to 70 percent of visible light passes through full cloud cover, so even in the fall season, there's enough sun to power your house. If Germany can supply 25 percent of its electricity from solar, what's stopping us?
MYTH Because solar is all the way up on the roof, it's hard to maintain. FACT Today's solar panels are generally warranted for 25 years and require little to no maintenance. Dust and leaves have a negligible effect. If you choose, you can hose off a solar panel, or you can just wait for the rain.
MYTH Weak roofs can't maintain solar panels. FACT Solar panels are actually stronger than a roof, installation makes a roof tougher.
MYTH Solar gets me off the power grid. FACT Unless you get a back-up battery system, you are still connected to the grid. This means that you can still get power when the sun goes down. It also means that, when the sun is really shining, you sell power back to PECO. But don't get too excited, no home has a large enough roof to turn a profit.
MYTH Geothermal isn't meant for the city. FACT Our dense housing stock makes geothermal a viable option. But homes south of the Philadelphia Art Museum are built on ground that is hard to drill into.
MYTH Windmills kill birds. FACT It's possible, but highly unlikely. Today's windmills spin on a vertical axis, designed to bump birds off, not slice them.
MYTH Developing 'clean' coal technology will create a safe reliable energy source. FACT Burning dense carbon matter creates carbon vapors. There is no way to use coal without releasing greenhouse gas. 'Clean' coal technology, which will take time and money to develop, is actually a process for sequestering and storing carbon. Coal is also a non renewable resource. It may seem plentiful, but once upon a time, so did oil.

State Support

New legislation could mean Pennsylvania is finally turning around its energy policy

story by
WILL DEAN

PENNSYLVANIA HAS LONG LAGGED behind other parts of the country in terms of supporting alternative energy and energy conservation. Perhaps because of our massive coal resources, the Keystone State has kept its thinking about energy production firmly in the past. In 2008, after years of pressure from environmental groups and concerned citizens, that began to change, and, if you're clever, you can take advantage of the new opportunities.

The passage of two pieces of legislation, the Alternative Energy Investment Act (AEIA) and Act 129, has provided a first step to help Pennsylvania, and Philly, switch to clean energy and be more efficient.

"This legislation puts Pennsylvania in the front of the pack in terms of energy efficiency targets... and will help the environment by cutting emissions and creating jobs at a time when we really need it," says Christine Knapp, Director of Outreach for the Philadelphia office of PennFuture, a nonprofit that pushed for the legislation.

How will it do all of that fun stuff? Well, the AEIA, passed in July, frees up 650 million dollars to support alternative energy and efficiency projects. Most of the money will be distributed by the Dept. of Environmental Protection and details should appear sometime in January. To stay informed, sign up for their e-mail list at: www.ahs2.dep.state.pa.us/aeif-signup/.

Based on details provided in the legislation, we can speculate about how the money will be allocated. One promised program, the Consumer Energy Program, will give out $92.5 million in loans, rebates and incentives to cover up to 25 percent of the cost of energy conservation projects for residents and small businesses. That probably means rebates and incentives for weatherization projects and the purchase of more efficient heating and cooling equipment. So if you've been thinking about fixing that gaping hole in the roof, insulating your attic or getting a new heater, 2009 might be the year to do it.

Other programs will offer money for energy-efficient home loans through the Pennsylvania Housing Agency, tax credits to encourage alternative energy production, loans and grants for geothermal and wind energy projects, and loans to businesses, counties, municipalities and school districts for clean energy projects.

Solar power, long the favorite of clean power advocates, also got a boost from the new legislation. It establishes the Alternative Energy Development Program, also known as the Pennsylvania Sunshine Program, to provide $100 million to cover up to 35 percent of the purchase and installation costs of solar projects for homeowners and small businesses.

To help create solar jobs, the Commonwealth Financing Authority (www.newpa.com) will give out $80 million in grants and loans for economic development in the solar sector. Among other things, this could mean money for solar equipment production.

All of that is good news for the burgeoning solar industry in Pennsylvania. "I do expect the industry to boom when this goes into effect," says Andrew Kleeman, founder of Eos Energy Solutions, a Philly-based solar installation company. "In reality, it is difficult to make solar viable without state rebates and incentives. If you look at any place with a robust solar industry, like Japan and California, they also have a lot of incentives."

Public interest in clean, local energy is already piqued by the mere possibility of public help. "We've got close to 40 customers who want to do solar now," says Kleeman, "but are waiting for the rebate."

That people are waiting is telling enough about the public interest in this funding, and also a good tip if you're considering applying for some of this money. Only projects begun after the funding details are released will be eligible, although you can start talking to a solar provider now.

In September, a few months after the passage of the AEIA, the state Senate began debating Act 129. Amidst soaring energy prices and media attention about expected electric rate increases when rate caps come off, the bill, which focuses on reducing energy consumption, was signed into law on October 15.

The new legislation also created consumption reduction targets that every Electricity Distribution Company (EDC)—PECO in our area—will have to meet, like reducing peak usage four percent by 2012, or face penalties of up to $20 million. So look out for PECO to start offering some kind of incentives or programs to reduce consumption.

Something they definitely will offer–since it is mandated by Act 129–is the option to get a "smart meter." What's so smart about these meters? Well, smart meters track your electricity usage in real-time, and transmit it to your provider for billing, so you can tell exactly when you are using electricity. Along with the meters, EDCs will also have to provide a payment plan that offers reduced rates during non-peak hours. The idea is to convince consumers to use less during peak hours when it is more expensive to generate power, because less efficient methods must be used to fill production gaps.

The original draft of the bill had EDCs covering the cost of these meters but after some last minute lobbying, the ironically-named Consumer Protection Committee, chaired by Sen. Robert Tomilson (R-Bucks), switched the burden of cost over to consumers.

As it now stands, EDCs must file a plan for offering both smart meters and an adjustable payment plan by August 15, 2009. Some time after that, smart meters will be available upon request and most likely at cost to you.

By now you might be thinking, well all this state stuff is all well and good, but, like most Philadelphians, I rarely even leave my neighborhood. What's going on in Philly?

In April, Exelon, the giant corporate parent of PECO, signed an agreement with German company Epuron to buy electricity from a one-megawatt solar farm–enough for 200 homes–in an empty section of the Philadelphia Naval Yard. Epuron will manage the site, with the blessing of the city, and the project is slated for completion by summer '09.

If you're not suffering from legislation sickness, which is like motion sickness but more boring, there is some City Council legislation to watch. Bill 080025 would mandate that all public building projects of 10,000 sq. ft. or more must meet the Leadership in Energy and Environmental Design (LEED) Rating System's silver level rating, or equivalent standards. Created by the U.S. Green Building Council, the LEED standards require buildings to meet criteria like availability of alternative transportation, reduction of water use, optimization of energy use, and conservation of materials and resources.

Bill 080758 has a smaller focus and would prohibit businesses from keeping their doors open while running their AC, which is sometimes done to entice customers on hot days. For info about these bills go to: http://www.phila.gov/citycouncil/.

With the details on the state's many new alternative energy and efficiency programs expected in January city's plans, there's a lot to keep track of in '09. For the handful of you who don't enjoy reading reams of mind-deadening bureaucratic legislation, this year is a good time to make an exception. Taking advantage of these opportunities now could pay off for years and years to come.

Get involved in energy legislation

CALL TO ACTION!

1. **PennEnvironment**, statewide advocacy, sends out action emails. www.pennenvironment.org
2. **Sign on Penn Future's** "take action" page at www.pennfuture.org
3. **Zoning Commission** meetings are open to the public on the second Wednesday of each month, 8 am on the 18th floor of 1515 Arch St. www.zoningmatters.org

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SPEAKERS SERIES

MIXED GREENS is a coalition of speakers and social entrepreneurs generating empowering stories of real life results for sustainable practices in the building industry and business communities. **Sustainable living in practical steps!**

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ILLUSTRATION BY MELISSA MCFEETERS

reviews by
ELLEN RHUDY

Cradle to Cradle

Remaking the Way We Make Things

by William McDonough and Michael Braungart

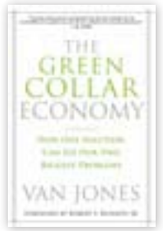
NORTH POINT PRESS, 2002; $27.50

McDonough and Braungart, a chemist and architect team whose designs saved big bucks for Ford, question our relationship to the natural world in this landmark book. Why do our food, furniture, clothing, cosmetics and cleaning supplies contain heavy dyes, toxins and carcinogens? Why, with a finite supply of resources, do we throw valuable materials into landfills? Is there a better way?

GRID CLASSIC

Recycling, according to the authors, is at best an afterthought. Our current industrial system, conceived when human beings were naïve about earth's resources, assumes our raw materials will always be there. We've learned a few things since then. The real solution, the authors assert, is not to condemn or moralize, but to redesign the way we make things. If a product's end is considered in its inception, it can become a raw material for the next cycle. Well-made goods have positive, nourishing impacts for our environment and for us. Packaging made out of tough, durable rice husks, which are plentiful in many parts of the world, become nutrients for our food, or for more rice husks. Detergent made of natural, biodegradable ingredients doesn't kill fish when it floats into our water supply—it feeds them.

This is cradle to cradle: A smarter, post-industrial system where production doesn't end in a landfill, but transitions into new goods. By developing a cradle to cradle, or C2C, assembly line, and separating our biological nutrients from our technical or synthetic ones, we can do things differently. Ultimately, a C2C system will boost the economy by driving the cost of production down. Getting there will be an ongoing evolution, the authors admit. But isn't the process the whole point?



The Green Collar Economy:

How One Solution Can Fix Our Two Biggest Problems

by Van Jones

HARPERONE, 2008; $25.99

"The main piece of technology in the green economy is a caulk gun" proclaims Jones. In his grounded, green world, environmentalism isn't about polar bears, it's about employment. Our urgent need for new jobs at all skill and educational levels is matched only by the urgent amount of work needed to make our existence ecologically sound. Can we connect the two? Building on the history of social movements, particularly civil rights, Jones affirms that the green collar economy is not a romance with nature, but a vital evolution. Our economy has been throwing away both the planet and people. Can we, in this defining moment, pick them back up?

Toolbox for Sustainable City Living

by Scott Kellogg and Stacey Pettigrew
illustrations by Juan Martinez

SOUTH END PRESS, 2008; $16

Kellog and Pettigrew show you how their Austin-based Rhizome Collective builds durable communities from the spare parts of the city. Pettigrew, who once presented to a packed house at the Wooden Shoe (5th and South), backs up theories of radical sustainable living with detailed instructions on individual or community food and livestock operations, collecting and purifying water, recycling waste, autonomous energy systems and bioremediation. The authors stress the need for individuals to make sustainable changes in their communities, without waiting for government or industry to take action. Their vision focuses on equality, and a belief that people, not outside interests, should control their community's resources.

Flow: For Love of Water

directed by Irena Salina

Salina's film takes on a broad swath of water-related issues, connected, appropriately, by the idea of flows, both physical and economic. Salina forms a convincing argument against the privatization of water, and directs our attention to community-based methods with inspiring, real-life examples for regaining control of our water supply.

Doctor's Orders

West Philly restaurant Rx is a prescription for swanky localism

by Will Dean

When Greg Salisbury opened Rx restaurant in University City, almost no one in the Philly restaurant industry was thinking local. "When we started in '01 there was only one other restaurant doing this," says the laidback and laconic Salisbury. "My first exposure to a CSA [Community Supported Agriculture] in 1997, at 17th and South, caused a revolution in the way I thought about food, and I knew if I started a restaurant it would revolve around local food."

In seven years, things have changed in the Philly food world, but Rx's local focus hasn't.

Rx is so in touch with the variety of local food available in Philly that their menu changes daily, depending on what local farms are offering. "They call me and send me the list and we pick from it," says Salisbury, who gets a lot of his food from the Fair Food project and directly from farms or local specialty shops.

When I stopped in last December, Rx's menu featured trout from the Poconos and chicken from Bell & Evans in Fredericksburg. Most dishes featured vegetables from Green Meadow Farms in Gap, PA, and herbs and greens from Overbrook Farms in Lansdale.

One dish, heirloom tomato salad, attests to the power of our localized food systems. Featuring at least four different kinds of fresh toms with wildly different tastes and texture. The astonishing variety in just one kind of vegetable proves small farm foods are anything but limited.

Small, pale pink tomatoes burst with sweet juice, mottled purple ones were cool, rich and kind of chewy, while a yellow heirloom had a shade of lemony tartness to its flavor. Fresh mozzarella from Claudio's in the Italian market and slivers of basil added creamy and sharp tastes to round out this simple but evocative local salad.

Local food has become more popular in Philly, as well as the rest of the country, and, consequently, the rise of interest has made Rx less of a niche destination. "Not as many people come in just for the local aspect," says Salisbury. "There's not as much novelty to saying that we're all local; it's almost expected now."

Rx has a firm footing thanks to its long-term championing of local food and the understated class and deliciousness of its creations (also, their dessert menu is as long as the lists of appetizers and entrées combined). Their eco-cred goes way back, too. "We were recycling plastics before the city even did that. We'd separate the ones and twos, bag everything up and cart it down to the Firehouse [a recycling pick-up point at 50th and Baltimore]," says Salisbury.

Even the art on the casually fancy walls is from local artists who do not have gallery space, which, along with the subdued Sufjan Stevens playing on the stereo, makes the place a favorite of young professional couples. The interior is fitting for an impressive date, with low lighting and mostly two-person tables. In fact, it's so swanky-looking that me and my scruffy beard were not completely believed to be a journalist and a journalist's beard. Fittingly, the cost can be steep—entrees range between $20 and $30—but the food is delicious and the brunch offered on Saturday and Sunday is reasonable at $7–$12 .

The goodness of Rx lies not only in its personal food quirks, but in the way it reminds us how much variety our small area supplies. The names of local farms and food producers are listed on the back of Rx's menus and help connect your French toast back to the living world that produced it, which is what local food is all about.

Stomach Medicine

The dinner menu changes every day, but on Saturday from 10 a.m.-2 p.m. and Sunday 10 a.m.-3 p.m., you can enjoy a great local brunch

Brioche French Toast, with bread from Metropolitan Bakery, eggs from Green Meadow Farms, mixed berries and maple syrup from Endless Mountains Cabin in the Poconos. The bread is rich and flaky and ups the decadence of a dish that already involves dipping something in egg, frying it and topping it with syrup and butter. Endless Mountains' syrup is sweet and subtle and challenges the assumption that only New England and Canada have great maples.

Scrapple Though you can never be completely sure what goes into scrapple, with King's, of Lancaster, you can be sure that whatever goes in it is all local. Fried to a delicious crisp, the pork bits (there's also a vegan version), cornmeal and whatever else comes with Pennsylvania Dutch apple butter to add some sweet to the savory.

Day Boat Fried Calamari Caught in New England, brought to Philly by local seafood purveyors Samuel & Son (www.samuelsandsonseafood.com), and never frozen, this squid dish tastes as fresh as if you caught it yourself. The breading is crunchy and the 'mari is just chewy enough. A light Vietnemese dipping sauce adds a little sweetness and makes this dish your not-completely-local guilty pleasure.

PHOTOGRAPHS BY KATIE CANNON

The Other Economy

Don't panic, Philly—there's work to do!

by KENNETH D. SMITH, PH.D.

Many Philadelphians feel anxious about the unfolding economic crisis. So far we've witnessed eye-popping declines in our 401Ks, unprecedented layoffs from CitiBank to City Hall, and planned cuts in City services, including libraries, firehouses, recreation centers and public swimming pools. Given the tense environment, is there any way to respond?

Well, to start, we can recognize that ours isn't the first. Throughout history, different societies have weathered economic trials through their informal economy, a system of relationships that holds up when the formal economy declines. During Argentina's financial meltdown, a thrifty, "do-it-yourself" culture created an urban gardening commerce that continues today. Laid-off workers took over shut-down factories and reopened them as successful co-ops that still survive today. Localized retail allowed for a credit and bartering system that supported merchants and families during tough times.

Russia's cooperative "we're all in this together" sensibility helped them cope with the financial meltdown that began during the Yeltsin years. Because the Soviet economy failed to produce an adequate supply of housing and market goods, Russians knew how to barter, share living space and work together in networks of family, friends and neighbors. Urban farming was integral to the non-market economy. According to some reports, over 85 percent of Russian professionals grew food on their household plots.

The United States has its own culture of resilience. Faced with the end of tobacco price supports, Kentucky farmers snapped back to economic life by utilizing land for expanded hay, grain and cattle, while developing markets for new crops. The Cajun community in Abbleville, LA, has withstood petroleum booms and busts because their kinship ties support families in need.

Philadelphia may not be Cajun country, but we have plenty of resources for our own informal economy. First, we still have districts dense with local businesses that employ our neighbors and offer high-quality goods and services. By shopping locally, we start to keep our dollars in the city. But local businesses and business associations can also work together by sharing resources, buying from one another and offering credit or bartering with loyal customers.

We may not have Russia's urban gardening tradition, but we do have plenty of vacant land that can provide fresh, healthy fruits and veggies. Food can be grown just about anywhere, including rooftops and rail sides. Gardening, harvesting fruit trees and sharing and selling the produce cultivates both market and non-market exchanges in our communities. Our many pocket parks and playgrounds need a little attention these days, but if we fix them up, they become invaluable public spaces for neighborhood meetings, celebrations and marketplaces.

If we refocus on collaboration and shared responsibility, we can spur a rich, local, sustainable economy based on a network of micro-enterprises.

We are a large city, but we have strong neighborhoods, houses of worship, community development corporations and civic associations. By working together, these organizations create a network for exchanging volunteer time, group meals, encouragement or information about job leads. Over time, this network fosters trusting and mutually beneficial relationships that support an informal economy and rebuilds those basic connections that economic globalization has helped destroy. In the past, competition for grant dollars has created a lot of tension and mistrust in our nonprofit sector. However, if we refocus on collaboration and shared responsibility, we can spur a rich, local, sustainable economy based on a network of micro-enterprises.

Global capitalism has never been sustainable and we may soon witness its demise. While the dissolution of the financial sector is the most visible, we must not forget that the entire global economy is run on oil, cheap labor and global supply chains that place our food, jobs and environment at risk. A stronger, more sustainable future involves localized production, and that requires local economies of cooperation. So let's roll up our sleeves and get working—together.

ILLUSTRATION BY JUDE BUFFUM

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Weekdays 10 am – 7 pm * Saturday 9 am – 6 pm
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